

ABSTRACT

The four-pole synchronous motor comprises a stator core (23) having first magnetic pole cores (36) formed at both ends of a connection body part (24) of crisscrossed connection body parts (24, 25) and second magnetic pole cores (39) formed at both ends of the connection body part (25). The first magnetic pole cores (36) include magnetic flux acting surface parts (37) extended toward both sides thereof in a circumferential direction. A shape of each magnetic flux acting surface part (37) on one side of a longitudinal centerline (M) of the first magnetic pole cores (36) is different from that on the other side so as to be magnetically asymmetrical with respect to the longitudinal centerline (M).